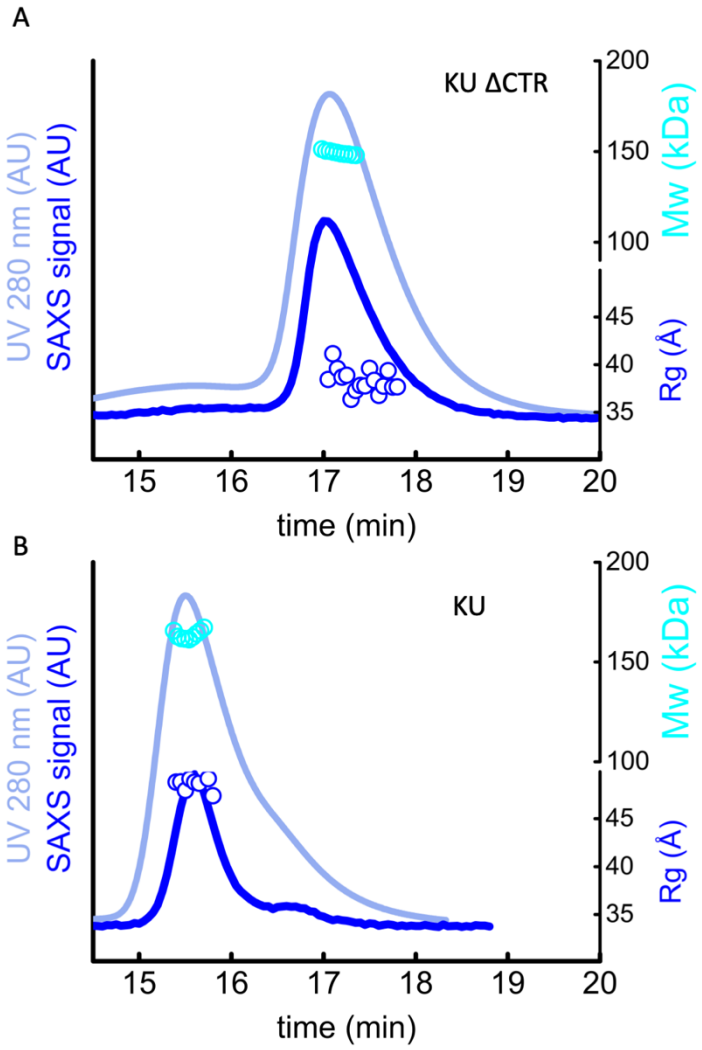
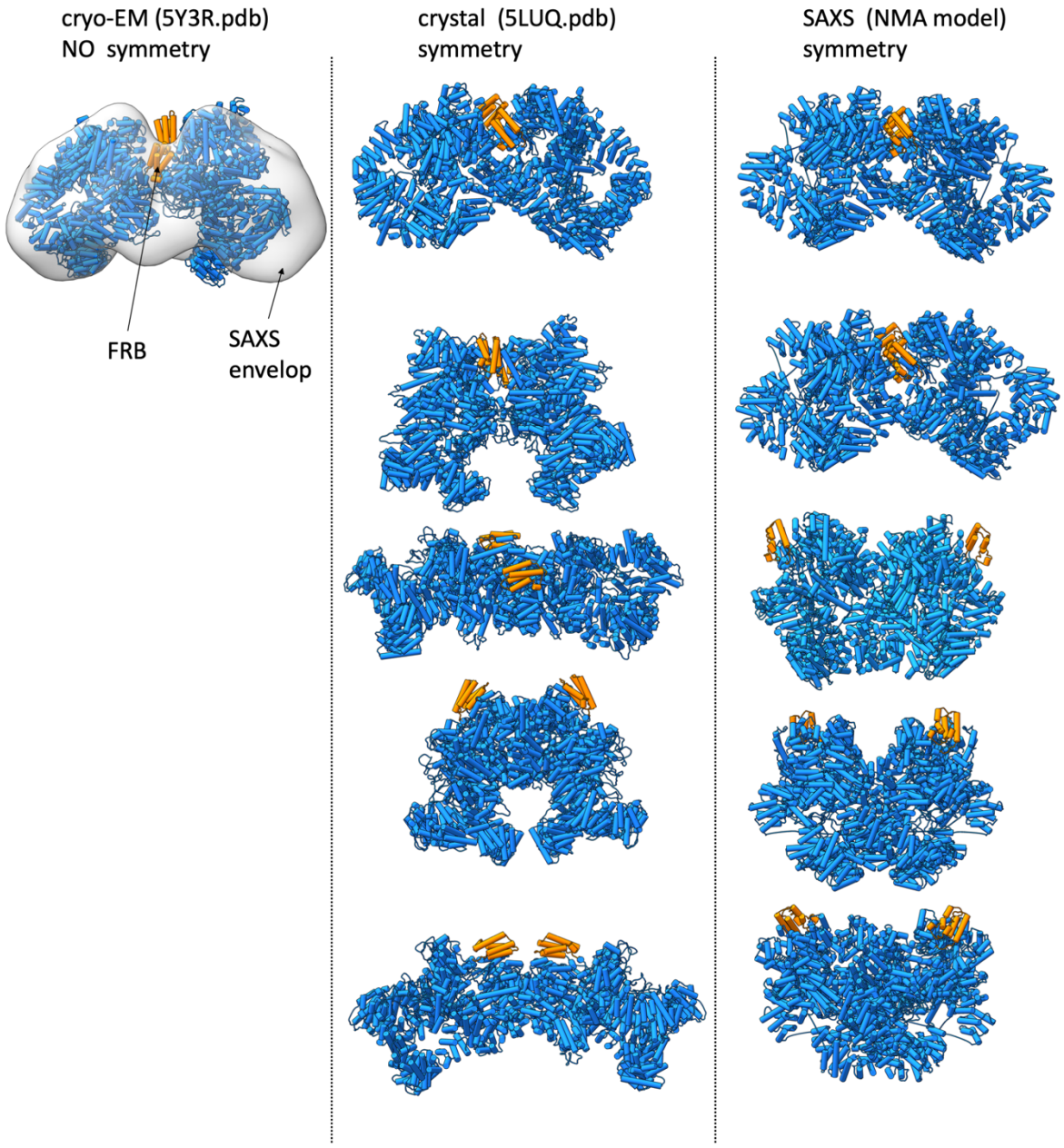
Supplementary Material



Supplementary Fig. 1

A-B) SEC-MALS-SAXS chromatograms for KUΔCTR and KU assembly. Solid lines represent the MALS signal shown as UV signal (light blue) or integrated SAXS signal (dark blue) in arbitrary units, while symbols represent molecular mass (light blue) and Rg values for each collected SAXS frame (dark blue) versus elution time.



Supplementary Fig. 2
Left panel - The dimer of DNA-PKcs reconstructed by docking of two DNA-PKcs taken from the DNA-PK structure (PDBID: 5Y3R [15]) without symmetry operator. SAXS envelop for self-association DNA-PKcs dimer, taken from [27] is superimposed on the dimer model. Middle panel - The dimer of DNA-PKcs reconstructed by docking of two DNA-PKcs crystal structures [3] (PDBID: 5ULQ) using symmetry operator. Right panel - The dimer of DNA-PKcs reconstructed by docking of two SAXS-based DNA-PKcs models using symmetry operator. FRB domains are colored orange.